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| 1059 1950 095252009 BERESKIN AND PARR LLP/S.E.N.C.R.L., s.r.l. 40 KING STREET WEST BOX 401 TORONTO, ON M5H 3Y2 | | | EXAM | EXAMINER | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/811,154 PETTA ET AL. Office Action Summary Examiner Art Unit Gregory J. Strimbu 3634 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on <u>02 March 2009</u>. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 2-17 and 21-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 2-17 and 21-26 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 29 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

information Disclosure Statement(s) (PTO/S5/06)
 Paper No(s)/Mail Date ______.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Specification

The amendment filed March 2, 3009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the first cavity receiving therein an upper portion of the sash frame when the sash frame is lifted up relative to the master frame for installation and removal as set forth in claim 9.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

Claims 7-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "a first sash frame interlacing configuration on lines 2-3 of claim 7 render the claims indefinite because it is unclear whether or not the first sash frame interlacing configuration includes the vertically directed tongues and grooves as set forth in claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5280686) in view of Kownacki et al. (US 6749797). Davies discloses a frame assembly comprising:

- a) a unitary master frame 10 including upper and lower horizontal master frame members 15 and 16, and opposed first 14 and second 13 vertical jamb members extending between the upper and lower horizontal master frame members; and
- b) a unitary sash frame 12 slidably mounted within the master frame, the sash frame including upper and lower horizontal sash frame members 46 and 47, and a pair of opposed side members 44 and 45 extending vertically between the upper and lower horizontal sash frame members.

a mullion 33 defined by a vertical member extending contiguously from, and vertically between the upper 15 and lower 16 horizontal master frame members, the mullion having a vent side (not numbered, but shown on the right hand side of the mullion in figure 1) directed towards the first vertical jamb member 14 and a fixed side (not numbered, but shown on the left hand side of the mullion in figure 1) directed towards the second vertical jamb member 13,

the mullion having glazing support details 39, screen support details 63, projections 23 and channels 54, 55, 56, a first sash frame interlacing configuration (not numbered, but comprising the portion of the master frame 10 which is removed for the installation of element 78), a first cavity (not numbered, but shown in figure 2 above the sliding sash frame 12 where the reference character 77 is located) which traverses the

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mullion as shown in figure 6 and is open towards the lower horizontal master frame member as shown in figure 4, a shoulder defined by the cut 78B as shown in figure 6, a second sash frame interlacing configuration (not shown but comprising the portion of the guide 24 which is cut out for the insertion of element 78 when the master frame is inverted), a glider element 74. Davies is silent concerning a one-piece unitary master and sash frames.

However, Kownacki et al. discloses a method of making a master frame and a sash frame of a window comprising integrally molding the master frame 30 and the sash frame 50

It would have been obvious to one of ordinary skill in the art to make the frames of Davies by using the integrally molding method steps, taught by Kownacki et al., to avoid water and air penetrating the corner joints and to increase the torsional rigidity of the frames.

Claims 2 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5280686) in view of Arbetter (US 5189841). Davies discloses a frame assembly 10, the frame assembly comprising:

- a) a unitary master frame including upper 15 and lower 16 horizontal master frame members, and opposed first 13 and second 14 vertical jamb members extending between the upper and lower horizontal master frame members; and
- b) a unitary sash frame 12 slidably mounted within the master frame, the sash frame including upper 46 and lower 47 horizontal sash frame members, and a pair of

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opposed side members 44 and 45 extending vertically between the upper and lower horizontal sash frame members.

wherein the master frame further comprises a mullion 33 defined by a vertical member extending contiguously from, and vertically between, the upper and lower horizontal master frame members, the mullion being integral with the master frame, the mullion having a vent side (not numbered, but shown in figure 1 on the right hand side of figure 1) directed towards the first vertical jamb member 14 and a fixed side (not numbered, but shown on the left hand side of figure 1) directed towards the second vertical jamb member 13. Davies is silent concerning integrally molding the master frame and the sash frame.

However, Arbetter discloses an integrally molded unitary master frame wherein each surface of the master frame members is open to an exterior of the master frame such that the master frame is free of enclosed cavities. Additionally, Arbetter discloses an integrally molded unitary sash frame, wherein each surface of the integrally molded unitary sash frame members is open to an exterior of the sash frame such that the sash frame is free of enclosed cavities.

It would have been obvious to one of ordinary skill in the art to manufacture the frame assembly of Davies with an integrally molded unitary master and sash frame members, as taught by Arbetter, to reduce the number of steps required to assemble the frame assembly.

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Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davies in view of Arbetter (US 5189841). Davies discloses a frame assembly, the flame assembly comprising:

- a) a unitary master flame 10 including upper 15 and lower 16 horizontal master frame members, and opposed first 14 and second 13 vertical jamb members extending between the upper and lower horizontal master frame members, and a mullion 33 defined by a vertical member extending contiguously from, and vertically between, the upper and lower horizontal master frame members, the mullion having a vent side (not numbered, but shown on the right hand side of the mullion in figure 1) directed towards the first vertical jamb member 14 and a fixed side (not numbered, but shown in figure 1 on the left hand side of the mullion) directed towards the second vertical jamb member 13:
- b) a unitary sash frame 12 slidably mounted within the master frame, the sash flame including upper 46 and lower 47 horizontal sash frame members, and a pair of opposed side members 44 and 45 extending vertically between the upper and lower horizontal sash frame members, the sash frame being slidable between open and closed positions within the master frame; and
- c) seal support elements (labeled below) on the master frame for securing seals to the master frame, the seals adapted to engage the sash frame for inhibiting penetration of fluid from an exterior environment to an interior environment when the sash frame is in the closed position.

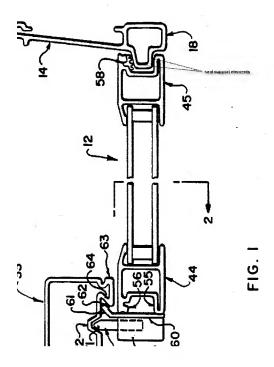
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Davies is silent concerning integrally molding the master frame and the sash frame.

However, Arbetter discloses a method of making a master frame 60 and a sash frame 62 of a window comprising integrally molding the master frame and the sash frame.

It would have been obvious to one of ordinary skill in the art to manufacture the frame assembly of Davies by using the integrally molding method steps, taught by Arbetter, to avoid water and air penetrating the corner joints and to increase the torsional rigidity of the frames.

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Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Davies in view of Kownacki et al. as applied to claims 21-23 above, and further in view

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of Japanese Patent Publication 2002-227551. Davies, as modified above, is silent concerning, *inter alia*, a fluid penetration flow path.

However, Japanese Patent Publication 2002-227551 discloses a frame assembly comprising:

- (a) a unitary master flame including upper and lower horizontal master flame members 10 and 40, and opposed first 20 and second 30 vertical jamb members extending between the upper and lower horizontal master frame members, and a mullion defined by a vertical member extending contiguously from and vertically between the upper and lower horizontal master frame members, the mullion having a vent side directed towards the first vertical jamb member and a fixed side directed towards the second vertical jamb member;
- b) a unitary sash frame 50 slidably mounted within the master frame and movable between open and closed positions, the sash frame including upper and lower horizontal sash frame members 51 and 55, and a pair of opposed side members 52 and 53 extending vertically between the upper and lower horizontal sash flame members;
- (c) at least one fluid penetration flow path (not numbered, but shown between the rail 53 and the mullion 63 as shown in figures 2 and 6) extending between the external and internal environments through the frame assembly when the sash frame is in the closed position; and
- (d) a weather buffering mechanism provided in the at least one fluid penetration flow path and adapted to inhibit the penetration of fluid from the exterior environment to the interior environment along the fluid penetration flow path, the weather buffering

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mechanism including a weather buffering chamber (not numbered, but shown in figure 6 between the rail 53 and the mullion 63) disposed in the at least one fluid penetration flow path and extending between an exterior seal (not numbered, but shown on the right hand side of figure 6 as the angled surfaces of the rail 53 and the mullion) disposed upstream of the buffering chamber and an interior seal 66 disposed downstream of the buffering chamber:

an exterior drain 15:

wherein the weather buffering mechanism further comprises an air reservoir (not numbered, but shown in figure 6 as the volume of air defined by the U-shaped portion of the mullion 63) substantially separated from the buffering chamber by a cover member 71, the cover member comprising apertures (not numbered, but shown in figure 6 between each element 71 of the cover member 71) therethrough, the air reservoir in fluid communication with the buffering chamber through the apertures to provide a source of generally dry air to be drawn into the buffering chamber.

It would have been obvious to one of ordinary skill in the art to provide the master frame of Davies, as modified above, with the fluid management system, as taught by Japanese Patent Publication 2002-227551, to prevent water from penetrating between the mullion and the sash frame to the inside of the frame assembly.

Response to Arguments

Applicant's arguments filed March 2, 2009 have been fully considered but they are not persuasive. Art Unit: 3634

The applicant argues that molding process of Kownacki et al. cannot be used to create the unitary frame having the shape as taught by Davies. Davies discloses the same structure as claimed by the applicant, but for the integral molding characteristics. The combination of the teachings of Kownacki et al. and Davies does not require that every single feature of the frame assembly be integrally molded exactly as disclosed by Davies. One of ordinary skill in the art would realize that certain features of the frame assembly of Davies would not be easily molded and could be modified. As an example, the J-shaped upper end of the jamb members 13, 14 in figure 1 of Davies could be replaced with a flange 32 as shown in figure 1 or similar structure that would perform the same function. Moreover, one of ordinary skill in the art could change the shape of the frame assembly of Davies so that it is more easily molded and then subsequently add the portions of the frame assembly that can not be easily molded to reach the same final shape as disclosed by Davies. To assume that one of ordinary skill in the art would not have the knowledge that some shapes may need to be modified so that they can be more easily molded, is simply an untenable position. Assuming arguendo that the person combining the teachings of Davies and Kownacki et al. did not know that some shapes of Davies may need to be changed in order to more easily mold the frame assembly, Kownacki et al. teaches performing post mold operations in step 98. As set forth in column 5, lines 3-5, step 98 includes trimming. Thus, said person, when combining the teachings of Davies and Kownacki et al. would know that some shapes of Davies could be molded in a shape that can be more easily molded and then cut into the final shape as disclosed by Davies. As an example, the J-shaped portions of the

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jamb members could be molded as a solid element and then cut into the shape as shown in figure 1 of Davies.

The applicant then argues that Davies requires accurately formed inner wall surfaces for the corner joint assemblies. This is not persuasive because the mechanical connector 17 is no longer needed when the frame assembly is integrally molded. In other words, there would be no joint between the vertical 13, 14 and horizontal 15, 16 frame members since they would be one single element after the integral molding. Thus, the connector 17 is not needed.

Next, the applicant argues that Davies in view of Kownacki et al. fails to disclose a sash frame interlacing configuration that provides a vertical clearance between vertically aligned surfaces of the sash frame and master frame, the surfaces being integrally molded with the respective frames, and the clearance providing spaced for lifting the sash frame relative to the master frame for installation and removal. This is not persuasive. As shown in figure 2 of Davies, there is a space between the top of the upper sash frame member 46 and the bottom of the upper master frame member 15. This space provides for the vertical clearance between the vertically aligned surfaces, i.e., the surfaces of the upper sash frame member and the bottom of the upper master frame member. The surfaces are integrally molded and allow for the lifting of the sash frame relative to the master frame when the sash frame is in the position as shown in figure 6 with the insert 78 removed. Thus, when the sash frame is in the position as shown in figure 6 and the insert 78 is removed, the surfaces, as set forth above, allow

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the sash frame to move vertically relative to the master frame before and during the removal of the sash frame from the master frame.

The applicant's comments concerning claim 9 are not persuasive for the following reasons. Davies discloses an interlacing configuration which at least includes the cavity (not numbered, but shown in figure 2 as the cavity in which reference character 77 is). Said first cavity does not include the insert 78. Thus, the first cavity is integrally molded in the upper horizontal frame member. The cavity has a length that traverses the mullion and is open towards the lower horizontal frame member when the insert 78 is not disposed therein. Since the first cavity also includes the space between the shoulders 78A and 78B, the upper portion of the sash frame is received in the first cavity when the sash frame is removed from the master frame.

Regarding the applicant's comments concerning claim 17, the examiner respectfully disagrees. As noted above, the combination of Davies with another reference teaching the integral molding of a closure frame, i.e., Arbetter, is a combination of teachings. Thus, one with ordinary skill in the art would realize that every shape of Davies may not need to be exactly reproduced and that certain accommodations for making the master frame and the sash frames easier to mold may be necessary. Additionally, it should be pointed out that the applicant has used the open ended language "comprising" thus, claim 17 does not prohibit additional forming steps performed on the master and sash frames after the integral molding thereof. Therefore, one of ordinary skill in the art could mold the general shape of master and sash frames and then cut and trim the frames to the desired shape or attach elements

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to the master and sash frames to achieve the desired shape. Finally, it should be noted the hollow sections are not crucial to the operation of the master and sash frames of Davies.

Finally, the declaration of Gabriel Petta is not persuasive because it presumes that the exact shape of the master and sash frames of Davies must be produced in a single integral molding operation. However, when one of ordinary skill in the art is combining teachings of references, he or she must consider the teachings of both references. Obviously, one of ordinary skill in the art would realize that every exact shape of Davies may not be easily moldable. Thus, he or she would make an accommodation for this when molding the frames of Davies as set forth in the arguments above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory J. Strimbu/ Primary Examiner, Art Unit 3634